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AIR POLLUTION REPORT

FEDERAL FACILITIES

METROPOLITAN LOUISVILLE

INTERSTATE AIR QUALITY CONTROL REGION

ENVIRONMENTAL PROTECTION AGENCY

Air Pollution Control Office

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Exhaust Emissions		Nitrogen Oxides			
Fuels		Carbon Monoxide			
Refuse Disposal		Particles			
Abatement		Hydrocarbons			
Urban Areas		Boilers			
National Government					
Coal					
Fuel Oil					
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INTERSTATE AIR QUALITY CONTROL REGION

William Dennison
FEDERAL SOURCES BRANCH
DIVISION OF COMPLIANCE
AIR POLLUTION CONTROL OFFICE
ROCKVILLE, MARYLAND

APRIL 1971

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NARRATIVE

On December 6, 1969, the Metropolitan Louisville Interstate Air Quality Control Region was designated pursuant to section 107(a) of the Clean Air Act, as amended. The region consists of Clark and Floyd Counties in Indiana plus Jefferson County in Kentucky.

This report presents the current status of the Federally owned facilities in the region with regard to implementation of the objectives prescribed by the Clean Air Act and Executive Order 11507. Quantitative data on fuel burning and refuse disposal practices, air pollutant emissions, and abatement plans are included. The data in this report reflect that most recently available.

Table I lists the 43 Federal facilities in the region along with data concerning both fuel burning and refuse disposal practices for each. A summary by county of fuel-use is presented in Table II. The total fuel-use for Federal Facilities in the region is: 215 thousand tons of coal, 51,930 gallons residual oil, 3,538,369 gallons distillate oil and 448 million cubic feet natural gas.

Pollutant emissions are summarized by county in Table III. The facilities emit a total of 16,300 tons of sulfur oxides (SOX), 2,600 tons of nitrogen oxides (NOX), 75 tons of carbon monoxides (CO), 18,600 tons of particulates (PART), and 29 tons of hydrocarbons (HC) per year. Table IV lists those specific Federal Facilities ("Point Sources") which emit more than 100 tons per year of any one type of pollutant and the approximate rate at which they are polluting. Table V lists the coal fired boilers which are in violation of 42 CFR 76.4. This table also shows the number and size of the boilers, amount of coal used, and the amount of particulate material emitted and allowed.

The current (April 1971) status of the Federal installations within the region with respect to the implementation of their abatement plans* is shown in Table VI. In this table the proposed or needed abatement action is set forth as well as a listing of abatement measures already accomplished.

Data for the determination of the Federal Governments' air pollution contribution from mobile sources other than airplanes was not available at the time of this report.

*As prescribed in the Clean Air Act and Executive Order 11507

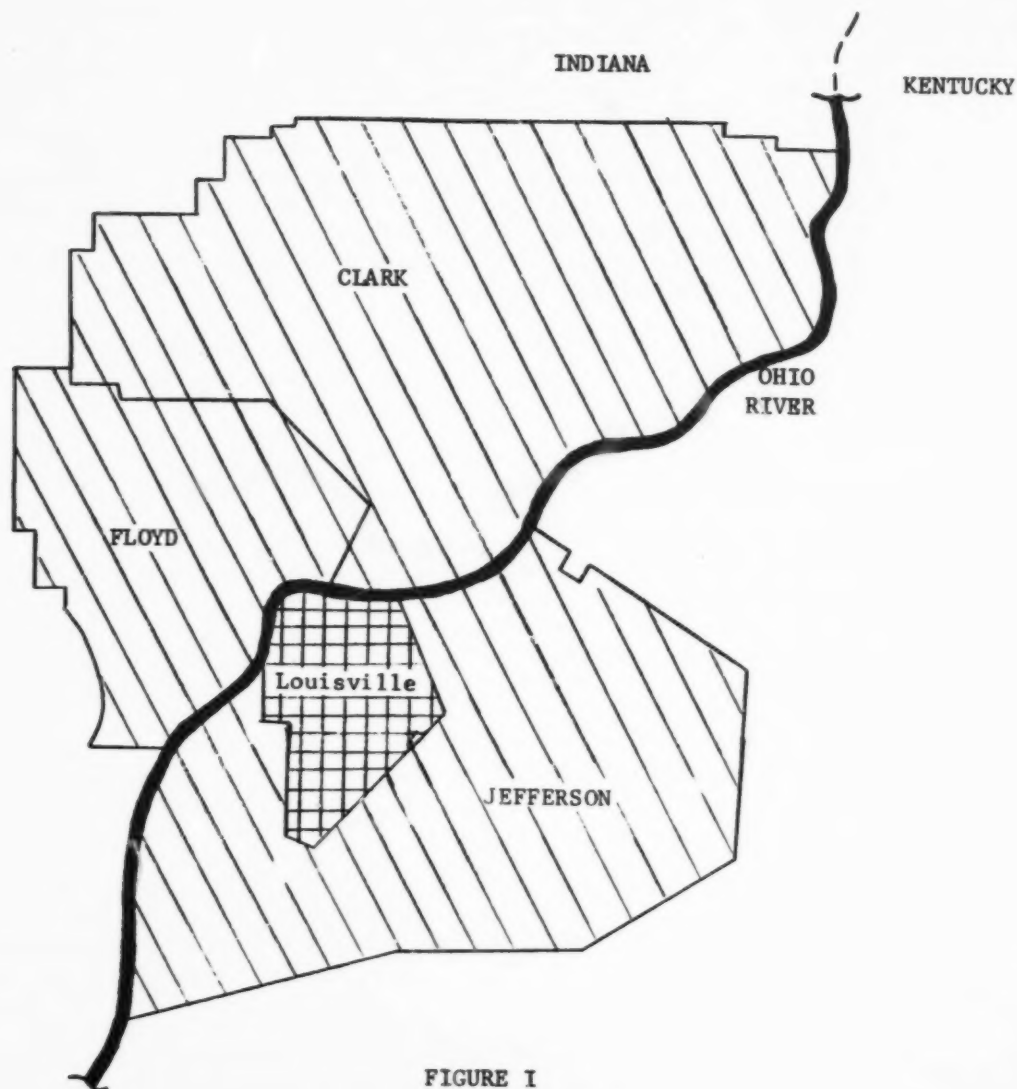


FIGURE I
METROPOLITAN LOUISVILLE INTERSTATE
AIR QUALITY CONTROL REGION

TABLE I

FUEL USAGE AND REFUSE DISPOSAL FOR FEDERAL FACILITIES

LOCATIONS	REFUSE (LBS/DAY)		FUELS (PER YEAR)			COMMENTS
	OPEN BURNING	INCIN- ERATION	GAS (MCF)	DIST OIL (GALS)	RESID OIL (GALS)	COAL (TONS)
INDIANA CLARK CLARKSVILLE						
INDIANA ARMY AMMO PLANT	0	0	0	2670093	0	214049
MCALPINE LOCKS & DAM	0	0	0	0	0	0
INDIANA CLARK JEFFERSONVIL						NO FUEL BURNED
FEDERAL DEPO 10TH-MORNGSD	0	0	13500	114990	0	0
INDIANA CLARK NABB						REFUSE TO DUMP
VORTAC 1531	0	0	0	300	0	0
INDIANA CLARK NO CITY ID						
USARC JEFFERSONVIL	0	0	0	0	0	0
						PURCHASED STEAM

TABLE I
FUEL USAGE AND REFUSE DISPOSAL FOR FEDERAL FACILITIES

LOCATIONS	REFUSE (LBS/DAY)		FUELS (PER YEAR)				COMMENTS
	OPEN BURNING	INCIN- ERATION	GAS (MCF)	DIST OIL (GALS)	RESID OIL (GALS)	COAL (TONS)	
INDIANA FLOYD NEW ALBANY							
FED BLDG-CTH 121 W. SPRING	0	0	0	0	0	0	ABANDONED
FED OFF BLDG SPR PEARL ST	0	0	58	0	0	0	
NATIONAL CEMETERY	0	0	624	0	0	0	REFUSE TO DUMP
KENTUCKY JEFFERSON LOUISVILLE							
NG BOWMAN FIELD	0	0	0	0	0	0	MOVED FROM BOWMAN FIELD
NAVY ORDINANCE PL	0	20	324598	11624	51930	0	
FED BLDG CHESTNUT ST	0	0	0	0	0	0	HEAT FROM 601 BROADWAY

TABLE I
FUEL USAGE AND REFUSE DISPOSAL FOR FEDERAL FACILITIES

LOCATIONS	REFUSE (LBS/DAY)		FUELS (PER YEAR)				COMMENTS
	OPEN BURNING	INCIN- ERATION	GAS (MCF)	DIST OIL (GALS)	RESID OIL (GALS)	COAL (TONS)	
1405 BROADWAY BLDG	0	0	0	0	0	600	
830 WEST BROADWAY BLD	0	0	0	0	0	0	NOT IN OPERATION
PO-CTHSE 601 W BROWAY	0	0	70341	50000	0	0	REFUSE TO DUMP
CAVE HILL NAT-CEMETERY	0	0	0	0	0	0	WITHIN PRIVT CEMETERY
ZAC TAYLOR NAT.CEMETERY	0	0	800	0	0	0	REFUSE TO DUMP
USARC LOUTSVILLE	0	0	0	79000	0	0	REFUSE TO DUMP
NICOLS SUPPORT FAC	0	0	25332	0	0	0	REFUSE TO DUMP

TABLE 1
FUEL USAGE AND REFUSE DISPOSAL FOR FEDERAL FACILITIES

LOCATIONS	REFUSE (LBS/DAY)		FUELS (PER YEAR)				COMMENTS
	OPEN BURNING	INCIN- ERATION	G/ (MCF)	DIST OIL (GALS)	RESID OIL (GALS)	COAL (TONS)	
VA HOSPITAL ZORN AVE	0	0	156	585912	0	0	PRIVATELY OWNED INCIN
AIR NAT GRD STAND. FLD	0	0	12546	3000	0	0	REFUSE REMOVED
USCG LOUISVILL	0	0	0	4250	0	0	REFUSE REMOVED
ATCT STANDIFORD	0	0	0	3200	0	0	NO REFUSE
ATCT BOWMAN FIELD	0	0	2	0	0	0	NO REFUSE
COE-NOALPINE LOCK & DAM	1	0	0	8000	0	0	
COE-LOUISVIL REPAIR STA.	5	0	0	8000	0	0	

TABLE I

FUEL USAGE AND REFUSE DISPOSAL FOR FEDERAL FACILITIES

LOCATIONS	REFUSE (LBS/DAY)		FUELS (PER YEAR)				COMMENTS
	OPEN BURNING	INCIN- ERATION	GAS (MCF)	DIST OIL (GALS)	RESID OIL (GALS)	COAL (TONS)	
CARDINAL HILL REC STA	0	0	0	0	0	0	ELECTRIC HT
FAA-ASR 12581	0	0	0	0	0	0	AIRPORT RADAR
FAA-RTR 12645	0	0	0	0	0	0	TRANSMITTER RECEIVER
FAA-NM 12726	0	0	0	0	0	0	MARKER
FAA-GS 12727	0	0	0	0	0	0	VERTICAL NAV AID
FAA-LOC 12728	0	0	0	0	0	0	HORIZONTAL NAV AID
FAA-NM 12730	0	0	0	0	0	0	MARKER

TABLE I

FUEL USAGE AND REFUSE DISPOSAL FOR FEDERAL FACILITIES

LOCATIONS	REFUSE (LBS/DAY)		FUELS (PER YEAR)				COMMENTS
	OPEN BURNING	INCIN- ERATION	GAS (MCF)	DIST OIL (GALS)	RESID OIL (GALS)	COAL (TONS)	
FAA-OM 12731	0	0	0	0	0	0	OUTER MARKER
FAA-OM 12734	0	0	0	0	0	0	OUTER MARKER
FAA-GS 12735	0	0	0	0	0	0	VERTICAL NAV AID
FAA-LOC 12736	0	0	0	0	0	0	HORIZONTAL NAV AID
FAA-ALSF 12764	0	0	0	0	0	0	APPROACH LIGHT SYSTEM
FAA-VASI 12853	0	0	0	0	0	0	LANDING LIGHTS
FAA-RUR 12858	0	0	0	0	0	0	RECEIVER

TABLE I
FUEL USAGE AND REFUSE DISPOSAL FOR FEDERAL FACILITIES

LOCATIONS	REFUSE (LBS/DAY)		FUELS (PER YEAR)				COMMENTS
	OPEN BURNING	INCIN- ERATION	GAS (MCF)	DIST OIL (GALS)	RESID OIL (GALS)	COAL (TONS)	
FAA-RUR 12859 KENTUCKY JEFFERSON ANCHORAGE	0	0	0	0	0	0	RECEIVER
POST OFFICE PARK ROAD KENTUCKY JEFFERSON BUECHEL	0	0	0	0	0	10	REFUSE REMOVED
FAA-FM 12733 KENTUCKY JEFFERSON FERN CREEK	0	0	0	0	0	0	RADIO MARKER BEACON
FAA-VTAC 12732	0	0	0	0	0	0	RANGE-DIRECT AID

TABLE II
ANNUAL FUEL USE BY FEDERAL FACILITIES

	COAL (TONS)	RESID OIL (GAL)	DIST OIL (GAL)	GAS (MCF)
INDIANA				
CLARK	214049	0	2785383	13500
FLOYD	0	0	0	682
KENTUCKY				
JEFFERSON	610	51930	752986	433775
TOTAL	214659	51930	3538369	447957

TABLE III
FEDERAL CONTRIBUTION TO AIR POLLUTION
(TONS/YEAR)

	SOX	NOX	CO	PART	HC
INDIANA					
CLARK	16300	2500	56	18500	25
FLOYD	0	0	0	0	0
STATE TOTAL	16300	2500	56	18500	25
KENTUCKY					
JEFFERSON	37	73	19	130	6
STATE TOTAL	37	73	19	130	6
AREA TOTAL	16300	2600	75	18600	31

NOTE: (1) EMISSIONS REPORTED IN SIGNIFICANT FIGURES
(2) EMISSIONS LESS THAN 0.5 TONS/YR REPORTED AS ZERO

TABLE IV
FEDERAL POINT SOURCES
(TONS/YEAR)

	SOX	NOX	CO	PART	HC
INDIANA CLARK					
INDIANA ARMY AMMO PLANT	16300	2500	56	18500	25

TABLE V

COAL-FIRED BOILERS IN VIOLATION OF 42 CFR 76.4

INSTALLATION NAME	BOILER SIZE (MMBTU/HR)	NUMBER OF BOILERS	COAL USED (TONS/YEAR)	PART.(LBS/MMBTU) EMITTED	ALLOWED	PART. EMITTED TONS/YR/BOILER
INDIANA ARMY AMMO PLANT	170.0	11	19459	6.87	0.37	1670.6
1405 BROADWAY BLDG	5.9	2	300	5.86	0.60	23.7

TABLE VI
ABATEMENT PROGRAM FOR FEDERAL PROBLEM AREAS
IN THE
METROPOLITAN LOUISVILLE INTERSTATE
AIR QUALITY CONTROL REGION

- A. Statement of problem
- B. Abatement measures proposed in five year plan*
- C. Abatement measures accomplished or in progress

INDIANA

CLARK

CHARLESTOWN

Indiana Army Ammunition Plant

- A.
 - 1. Coal fired boilers
 - 2. Nitrating houses
 - 3. Open burning of explosive wastes
- B.
 - 1. None
 - 2. Plant Modernization
 - 3. None
- C.
 - 2. Project deferred

KENTUCKY

JEFFERSON COUNTY

LOUISVILLE

Nichols Support Facility

- A. Standby coal fired boilers
- B. Conversion to oil fired boiler
- C. Funds requested for FY 1973

Federal Building 1405 Broadway

- A. Coal fired boilers
- B. Conversion to gas fired boilers
- C. Funds allotted for FY '72

* 1967 - 72 plan per Executive Order 11282,
superseded by Executive Order 11507.

TABLE VII
POLLUTANT REDUCTION GOALS
(TONS/YEAR)

	SDX	NOX	CO	PART	HC
INDIANA					
CLARK	16300	2200	56	18500	25
FLOYD	0	0	0	0	0
STATE TOTAL	16300	2200	56	18500	25
KENTUCKY					
JEFFERSON	14	71	4	83	3
STATE TOTAL	14	71	4	83	3
AREA TOTAL	16300	2300	60	18600	28

NOTE: THESE REDUCTIONS WILL RESULT FROM ABATEMENT MEASURES PROPOSED, BUT NOT YET ACCOMPLISHED, IN THE FIVE-YEAR PLAN.

REFERENCES AND NOTES

1. Duprey, R.L., Compilation of Air Pollutant Emission Factors, Public Health Service Publication No. 999-AP-42, 1968.

All calculated emissions are based on these factors.

2. Report for Consultation on the Metropolitan Louisville Interstate Air Quality Control Region, Public Health Service, October, 1969.
3. Clean Air Act, as amended (42 U.S.C. 1857 - 1857L) Sec 107, Sec 111. November 21, 1967.
4. Executive Order 11507, Prevention, Control, and Abatement of Air and Water Pollution at Federal Facilities, February 4, 1970.
5. Title 42 - Public Health, Chapter I, Subchapter F, Part 76, June 2, 1966.
6. Bureau of the Budget Circular A-76 (Revised), May 18, 1970.
7. 1970 GSA Listing of Real Property owned by the Federal Government.